



IFW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

International Patent Application of

THORSØE ET AL.

Atty. Ref.: 550-730

Serial No. 10/568,498

Group: 1761

Filed: February 16, 2006

Examiner: To be assigned

For: PROCESS FOR PREPARING A FOOD PRODUCT USING
DEPOLYMERISED PECTIN AS STABILISER

* * * * *

July 14, 2006

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

**SUBMISSION OF INTERNATIONAL PRELIMINARY
REPORT ON PATENTABILITY**

Submitted herewith is a copy of the International Preliminary Report on
Patentability issued in PCT/IB2004/002795 dated February 21, 2006, for the Examiner's
consideration.

Respectfully submitted,

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By: _____

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PATENT COOPERATION TREATY

PCT/IB2004/002795

From the INTERNATIONAL BUREAU

ZCW

PCTNOTIFICATION CONCERNING
TRANSMITTAL OF COPY OF INTERNATIONAL
PRELIMINARY REPORT ON PATENTABILITY
(CHAPTER I OF THE PATENT COOPERATION
TREATY)

(PCT Rule 44bis.1(c))

To:

CLYDE-WATSON
D. Young & Co.
120 Holborn
London EC1N 2DY
ROYAUME-UNIMONEY £
ORDER
DIARYREC'D
(LONDON)

- 8 MAR 2006

ANSO
ENTRY
FOR

Date of mailing (day/month/year)

02 March 2006 (02.03.2006)

Applicant's or agent's file reference

P016324WO ZCW

International application No.

PCT/IB2004/002795

International filing date (day/month/year)

19 August 2004 (19.08.2004)

Priority date (day/month/year)

19 August 2003 (19.08.2003)

Applicant

DANISCO A/S et al

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Authorized officer

Idhir Britel

Facsimile No.+41 22 740 14 35

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PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference P016324WO ZCW	FOR FURTHER ACTION	See item 4 below
International application No. PCT/IB2004/002795	International filing date (<i>day/month/year</i>) 19 August 2004 (19.08.2004)	Priority date (<i>day/month/year</i>) 19 August 2003 (19.08.2003)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant DANISCO A/S		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).

2. This REPORT consists of a total of 7 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

- | | | |
|-------------------------------------|--------------|---|
| <input checked="" type="checkbox"/> | Box No. I | Basis of the report |
| <input checked="" type="checkbox"/> | Box No. II | Priority |
| <input type="checkbox"/> | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> | Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> | Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> | Box No. VI | Certain documents cited |
| <input type="checkbox"/> | Box No. VII | Certain defects in the international application |
| <input type="checkbox"/> | Box No. VIII | Certain observations on the international application |

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 740 14 35	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Date of issuance of this report 21 February 2006 (21.02.2006)</td> </tr> <tr> <td style="padding: 2px;">Authorized officer <div style="text-align: center; font-weight: bold; font-size: 1.2em;">Idhir Britel</div></td> </tr> <tr> <td style="padding: 2px;">Telephone No. +41 22 338 70 60</td> </tr> </table>	Date of issuance of this report 21 February 2006 (21.02.2006)	Authorized officer <div style="text-align: center; font-weight: bold; font-size: 1.2em;">Idhir Britel</div>	Telephone No. +41 22 338 70 60
Date of issuance of this report 21 February 2006 (21.02.2006)				
Authorized officer <div style="text-align: center; font-weight: bold; font-size: 1.2em;">Idhir Britel</div>				
Telephone No. +41 22 338 70 60				

PATENT COOPERATION TREATY

REC'D 10 DEC 2004

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From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

To:

see form PCT/ISA/220

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/B2004/002795

International filing date (day/month/year)
19.08.2004

Priority date (day/month/year)
19.08.2003

International Patent Classification (IPC) or both national classification and IPC
A23L1/0524, A23C9/154, C08B37/00, A23C9/137

Applicant
DANISCO AS

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/IB2004/002795

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/IB2004/002795

Box No. II Priority

1. ☒ The following document has not been furnished:

☒ copy of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(a)).

☐ translation of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43bis.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.

3. ☐ It has not been possible to consider the validity of the priority claim because a copy of the priority document was not available to the ISA at the time that the search was conducted (Rule 17.1). This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

4. Additional observations, if necessary:

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	2,4-16,22,23,25-40,42,44-49,52
	No: Claims	1,3,17-21,24,41,43,50,51
Inventive step (IS)	Yes: Claims	
	No: Claims	1-52
Industrial applicability (IA)	Yes: Claims	1-52
	No: Claims	

2. Citations and explanations

see separate sheet

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/IB2004/002795

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Reference is made to the following documents:

- D1: EP-A-0 868 854 (JAPAN TOBACCO INC) 7 October 1998 (1998-10-07)
- D2: FR 888 663 A (DEGUSSA) 20 December 1943 (1943-12-20)
- D3: WO 98/18349 A (NESTLE SA) 7 May 1998 (1998-05-07)
- D4: EP-A-1 206 909 (FUJI OIL CO LTD) 22 May 2002 (2002-05-22)
- D5: DE 27 59 032 A (EGYT GYOGYSZERVEGYESZETI GYAR) 12 July 1979 (1979-07-12)
- D6: DE 662 664 C (BENCKISER GMBH JOH A) 19 July 1938 (1938-07-19)
- D7: DE 648 225 C (BAYERISCHE MILCHVERSORGUNG G M) 26 July 1937 (1937-07-26)
- D8: WO 02/42484 A (KUNZ MARKWART ; SUEDZUCKER AG (DE); VOGEL MANFRED (DE); MUNIR MOHAMMAD) 30 May 2002 (2002-05-30)

2. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1, 3, 17-21, 24, 41, 43, 50 and 51 is not new in the sense of Article 33(2) PCT.

2.1. The document D1 discloses (cf. claims 1-4; examples 1, 4 & 5; table 4) a method for preparing bread, wherein a mixture comprising flour, skim milk, low molecular (i.e. depolymerised) pectin and further ingredients is inoculated with yeast and the resulting dough is kneaded and fermented.

The subject-matter of claims 1, 3, 17-21, 24 and 50 is therefore not novel (Article 33(2) PCT).

2.2. The document D2 discloses (cf. the entire document) a method for preparing food products comprising albumin, wherein a pectin containing starting material is subjected to hydrolysis in order to obtain a material containing depolymerised pectin. The hydrolysed material is supplemented with minerals and fermented, e.g. using a yeast culture.

The subject-matter of claims 1, 3, 17, 24 and 50 is therefore not novel (Article 33(2) PCT).

- 2.3. The document D3 discloses (cf. examples) a method for preparing a beverage, wherein a solution containing calcium chloride and pectin hydrolysates is added to skim milk in order to render the skim milk more stable, in particular to avoid sedimentation phenomena.
The subject-matter of claims 41, 43, 50 and 51 is therefore not novel (Article 33(2) PCT).
- 2.4. The document D4 discloses (cf. examples) a method for preparing acidic milk beverages, wherein a solution containing depolymerised pectin is added to milk in order to improve the stability and to lower the viscosity of the milk beverage.
The subject-matter of claims 41, 43, 50 and 51 is therefore not novel (Article 33(2) PCT).
- 2.5. The document D5 discloses (cf. p. 23 § 4 - p. 24 § 2) the use of metal ion complexes of polygalacturonic acids as ingredient for various foodstuffs, including dairy products.
The subject-matter of claim 50 is therefore not novel (Article 33(2) PCT).
- 2.6. The document D6 discloses (cf. the entire document) a method for preparing melted cheese, wherein depolymerised pectin is added to cheese curd, the latter being further processed and packed.
The cheese disclosed in D6 is considered as being indistinguishable from a cheese that is made by dissolving depolymerised pectin in cheesemilk and processing the cheesemilk to give melted cheese (cf. also the present method claim 41).
The subject-matter of claim 50 is therefore not novel (Article 33(2) PCT).
- 2.7. The document D7 discloses (cf. the entire document; in particular p. 2, l. 32-37) a method for preparing melted cheese, wherein depolymerised pectin is added to cheese material before the melting step.
The cheese disclosed in D7 is considered as being indistinguishable from a cheese that is made by dissolving depolymerised pectin in cheesemilk and processing the cheesemilk to give melted cheese (cf. also the present method claim 41).
The subject-matter of claim 50 is therefore not novel (Article 33(2) PCT).

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/IB2004/002795

- 2.8. The document D8 discloses (cf. p. 12 § 2; ex. 1-3; cl. 1, 13) yoghurt comprising hydrolysed pectin.

The subject-matter of claim 50 is therefore not novel (Article 33(2) PCT).

3. Dependent claims 2, 4-16, 22, 23, 25-40, 42, 44-49 and 52 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step, see documents D1-D8 and the corresponding passages cited in the search report.